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TACOMA PUBLIC UTILITIES

October 5, 2009

The Honorable Peter DeVries, Council Chair  
Washington State Building Code Council  
128 10<sup>th</sup> Ave SW  
P.O. Box 42525  
Olympia, WA 98504-2525

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**SBCC**

Dear Chairman DeVries:

Electrical utilities in Washington face a host of challenges. One of the most difficult is to satisfy a growing demand for electricity while at the same time lowering our environmental footprint and minimizing cost. The utility industry has learned that conservation is a vital component in an overall strategy to achieve these diverse goals. Simply stated, conservation is the least-cost, most environmentally friendly resource available to meet current and future energy needs. Moreover, building energy codes represent one of the most cost-effective conservation resources. That is why Tacoma Power<sup>1</sup> generally supports the proposed improvements to the Washington State Energy Code that are currently before the Council.

Well-considered and properly-enforced energy codes represent the best way to avoid "lost opportunities" – energy savings which are only cost-effective during construction. Consider for example the choice of a building's windows. During construction installing efficient windows can be accomplished at a small incremental cost. Conversely, once a building is finished it is often prohibitively expensive to achieve those same savings.

Governor Gregoire's Climate Action Team (CAT) identified new codes as a key component of the state's climate change mitigation strategy. The CAT recommended that the state's energy code be revised to achieve a 30 percent efficiency improvement.

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<sup>1</sup> Tacoma Power is the second largest municipal electric utility in Washington. The utility's service territory covers over 180 square miles and includes the cities of Tacoma, Fircrest, and University Place; as well as portions of Fife, Lakewood, Federal Way, and Steilacoom; the Fort Lewis and McCord military bases; and other parts of Pierce County. Tacoma Power presently serves about 160,000 customers with around 600 average megawatts (aMW) of electricity. Tacoma Power is a unit of Tacoma Public Utilities which also includes water and rail utilities.

With the CAT's efficiency goal in mind, the Washington State Building Code Council's Technical Advisory Committee worked for several months to develop 97 proposed code changes. These proposals were assembled through a consensus process and mostly rely on proven building efficiency strategies and equipment

Tacoma Power's internal standard when considering whether to support these proposals is simply cost-effectiveness. While most of the proposals appear to be cost effective and well understood, three may not pass this test and, therefore, not in the best interest for our community. Those measures are:

- HIGH EFFICIENCY WATER HEATING: a sub-option for heat pump water heater with a minimum EF of 2.0 in option 5b, Table 9-1 ENERGY CREDITS (DEBITS), Chapter 900 Additional Residential Energy Efficiency Requirements; and,
- HIGH EFFICIENCY WATER HEATING: a sub-option for solar water heating supplementing a minimum standard water heater in option 5b, Table 9-1 ENERGY CREDITS (DEBITS), Chapter 900 Additional Residential Energy Efficiency Requirements;
- RENEWABLE ELECTRIC ENERGY: all sub options in option 8, Table 9-1 ENERGY CREDITS (DEBITS), Chapter 900 Additional Residential Energy Efficiency Requirements

With regard to heat pump water heaters, the performance and customer acceptance of these appliances may be less certain than assumed in the supporting analysis. Tacoma believes more research should be conducted on heat pump water heaters to ensure that such technology will perform well in Washington state climates. The two renewable proposals, solar water heating and electrical energy, simply may not be cost-effective at this time given our expectations for future energy prices.

In conclusion, 94 of the 97 proposed code changes under consideration by the Washington State Building Code Council are clearly cost-effective, readily achievable and will significantly aid Washington's efforts to achieve its energy and environmental goals. Tacoma Power respectfully urges the Council to approve those 94 proposed changes. While it is uncertain whether these proposals will fully achieve the 30 percent conservation goal, set by the CAT, they represent a significant step in the right direction.

Sincerely,



Theodore C. Coates  
Superintendent/COO